

Proposed Multiport Intervals for Bedrock Monitoring Wells
Cabo Rojo Groundwater Contamination Site
Cabo Rojo, Puerto Rico

Well ID						Port No.	Port Interval ¹ (ft)	summary of revised ports (2)	Geophysical Results	Wireline Sampling Results	Rationale	Comments
Pozo Escuela	Well Depth - 191 feet bgs	11.5 - 9.5 in. diameter borehole	Water Level 10.3 feet bgs	Stickup - 0.7 feet ags		1	39-59	port 1: 39-59	fracture zone	PCE, TCE , cis-1,2-DCE	Based on geophysical interpretations this is a hydraulically connected transmissive zone that is highly fractured and interconnected; samples collected at 39 and 56 ft bgs have very similar concentrations	Throughout this zone the bedrock is highly fractured with irregular surface/diameter. There are no unfractured areas that could be used to isolate smaller intervals within the zone.
						2	original: 79.5-83 new: 79.5-86	port 2: 79.5-86	fracture zone	PCE, TCE , cis-1,2-DCE, 1,1-DCE	Fracture zone having flow into and up the borehole under ambient/pumping conditions and the only zone with detections of 1,1-DCE	Based on the information provided in the geophysical logs there are no identified zones having only "out flow"
						3	original combined with port 2: 83.5-86.5	port 3: 89-96	fracture zone	Not sampled	Fracture zone having flow into and up the borehole under ambient/pumping conditions	
						original: 4 new: 3	original: 87-96 new: 89-96	port 4: 157-162	fracture zone	PCE, TCE , cis-1,2-DCE	Fracture zone having flow into and up the borehole under ambient/pumping conditions	
						original: 5 new: 4	no change: 157-162	no port 5	fracture plane	PCE, TCE , cis-1,2-DCE	Fracture plane having flow into and up the borehole under ambient/pumping conditions	
MW-9R	Well depth - 190.7 ft bgs	4 in. diameter borehole	Water level - 16 ft bgs	Stickup - 2.7 ft ags		1	104-108	no change	transmissive zone	TCE , cis-1,2-DCE, 1,1-DCE	Transmissive zone having flow into and up the borehole under pumping conditions	
						2	124-127	no change	fracture plane	TCE , cis-1,2-DCE, 1,1-DCE	Fracture plane having flow into and up the borehole under pumping conditions	
						3	134-140	no change	fracture plane	TCE , cis-1,2-DCE, 1,1-DCE	Fracture plane having flow into and up the borehole under pumping conditions	
						4	164.5-168.5	no change	fracture plane	TCE , cis-1,2-DCE, 1,1-DCE	Fracture plane having flow into and up the borehole under pumping conditions	

¹All intervals depths are referenced to ground surface

(2) port intervals revised 9-26-2013 on advise of FLUTe (Mark Sanchez) to have at least 2 feet between port intervals